DeLorme

XMap® 6 GIS

Getting Started Guide

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Table of Contents

Welcome to XMap 6

Thank you for your purchase. XMap® offers a unique combination of GIS, GPS, and navigation tools that meet all of your mapping needs in a single, easy-to-use package.

In this Getting Started Guide, you will learn about:

- The XMap family of products
- What's new in version 6 with updates for 6.1 and 6.2
- Installing and modifying XMap
- Upgrading from a previous version of XMap
- Migrating your data from another DeLorme product or GIS product
- Installing XMap datasets
- Troubleshooting
- And more!

This is a reference guide. For detailed instructions for using XMap, see the XMap Help; open XMap, click the **Help** button ❓▾ on the toolbar, and then click **Help Topics**. A link to a printable User Guide on our website is also available from the Help menu.

Note: References to XMap 6 apply to all versions. Information that applies only to XMap 6.2 is indicated as such; XMap 6.2 includes all changes from XMap 6.1.

ATTENTION!!! Important Information for Existing DeLorme Software Users

To comply with Windows Vista™ standards and to provide a more stable and flexible multiple user environment, the DeLorme Docs folder, where all of your data, projects, and other DeLorme files are traditionally stored, is now located in the personal documents folder on your computer, rather than on the root of the C drive. All new data created in XMap 6 is stored in the personal documents folder, and default data paths no longer point to any previously existing data on the root of the C drive.

For detailed information about how to migrate your existing data to the new file system, see the XMap Help topic *Migrating Data to the New DeLorme Docs Folder*.

Note: All OpenSpace databases, layers, project files, draw layers, routes, XData databases, and other data types from previous versions of XMap are fully compatible with XMap 6.

What's New in XMap 6.2

• Updated and enhanced ArcSDE 9.3 support improves the ability to import and deploy GIS databases to the field—synchronize large GIS layers for the field in record time!

• Shapefile support for XMap 6 Professional—import shapefiles into the GIS tab and apply symbolization

  Note: This is already available in XMap GIS Enterprise and XMap GIS Editor

• Faster data cutting for Earthmate GPS PN-Series GPS devices

What's New in XMap 6.1

• New! NetLink Map Library subscription—download unlimited aerial and data for an annual subscription of $29.95

• New! GIS tab in Options dialog box allows you to customize default layer and query settings

• New! Automated update system; download updates to new versions of XMap

• New! Export files from XMap in Drawing Exchange (.dxf) format for use with AutoCAD

• Improved MrSID includes aux.xml support

What's New in XMap 6

• Works on Windows Vista™

  Improved multi-user permissions

• ArcSDE 9.2 support

• GIS layer append and replace features for import

• Improved GIS database synchronization (Enterprise only)

• GIS stationing support for field line assets with user-defined distance measures (Editor and Enterprise only)

• Create GIS and draw map packages for use on Earthmate PN-Series GPS devices;

independently overlay other datasets

• Download NOAA charts from NetLink for use in XMap and on Earthmate PN-Series GPS devices

• API access to routing, GPS navigation, and map controls

• GPS NavMode—a hands free full-screen navigation view in 2-D or 3-D

• Improved terrain profiling for multi-channel data—show travel speed, temperature, and other variables against the terrain

• GeoTagger provides updated image and data-tagging features—combine digital photos or data with GPS locations in a completely new way

• Route preferences for walking/jogging, cycling, off-roading, or driving

• Support for opening DeLorme Topo USA and Street Atlas projects; easily migrate your old projects to XMap

Key Features

XMap API Command Window

XMap includes a command prompt utility (XMapi) that allows you to control the application through the command line. The interface provides access to simple commands for performing a variety of basic operations, such as panning and zooming the map, performing quick searches, and creating routes. All operations are triggered from the command line but control the running application. Any commands that require further input prompt the user through the standard XMap user interface.

Support for Earthmate PN-Series GPS Devices

XMap is compatible with DeLorme's Earthmate PN-Series GPS devices—fully-integrated handheld GPS receivers that provide exceptional performance for outdoor and professional activities. Purchase of a PN-Series GPS includes XMap USA Topographic Data, which provides complete United States topographic and street map coverage, and a world base map for use when traveling between major international cities and towns. Also included is a bonus DVD dataset of Topo USA® precut maps at all magnifications. **Note:** The Topo USA 7.0 data on the bonus DVD and the XMap USA Topographic 2008 dataset use a new file

format for Earthmate PN-Series GPS devices to improve Find and map cutting accuracy. If you have existing map packages with data in older topographic data formats, you will need to re-cut the map packages you created to ensure routing integrity on the GPS device, as well as to access new POIs and data described above.

You can use XMap to create highly detailed areas of interest to transfer to a PN-Series GPS device. Your maps can include custom high-resolution imagery in MrSID, GeoTIFF, and GIS data; DeLorme format imagery (aerial, satellite, and USGS quad data) available through the NetLink tab; and a variety of symbols and waypoints. Once you select your areas of interest and create your maps, you can use the XMap exchange function to send the maps to the device along with custom routes, tracks, and waypoints. You can also view and control data layers on a PN-Series GPS device.

For Earthmate PN-Series GPS device firmware updates, check the NetLink tab in XMap.

Database Manager

XMap automatically installs a DeLorme database application that provides essential tools for DeLorme OpenSpace database management. Its easy-to-use interface allows database administrators to add new SQL server connections, add server account users, create databases and add users, modify database permissions, and create database subscriptions. The database backup/restore utility allows you to back up critical GIS data on your computer to remote media and restore it in the event of computer failure. You can open the Database Manager within XMap or from the XMap install directory.

Bulk Importing and Exporting

The XMap GIS Bulk Importer/Exporter is a command prompt utility that installs with XMap 6 GIS Editor and Enterprise. You can run the utility independently of the XMap application and use it to automate the import and export of vector GIS layers with DeLorme OpenSpace databases. Use batch files (.bat or .cmd) to import/export multiple files.

You can filter which attribute fields in a layer are included when exported, as well as reference an existing query to filter which geometries and associated attribute records are included in the exported data. Supported export formats include .openspace, .shp, .dxf, .dwg, and .txt (Enterprise and Editor only).

Note: The OpenSpace Transfer File is a DeLorme proprietary format that stores classification, query, label, and symbolization settings. They are designed to serve as exact

duplicates of their counterparts within the database and don't allow filtering of attribute fields during export; however, you can use queries to filter geometries and attribute records. All exported layers are in the latitude/longitude coordinate system and WGS1984 datum.

Importing from an ArcSDE 9.2 or 9.3 Database

XMap 6 GIS Enterprise allows you to import layers directly from ESRI ArcSDE databases to DeLorme databases. To import layers, use the Connect to Database utility in the GIS Import Wizard to connect to the ArcSDE database. You must provide the server name on which the ArcSDE installation resides, the port # (instance) of ArcSDE on the server (typically 5151), and the login name and password. When you have a connection to the ArcSDE instance, you can select available databases and use the Import Wizard or Bulk Importer to import layers from that database. You can import from ArcSDE 9.2 databases with all versions of XMap 6. You can import from ArcSDE 9.3 databases with XMap 6.2.

Spatial Queries

Spatial queries allow GIS users to ask direct geographic questions about how GIS data is spatially related. For example, "Which towns are located within a watershed?," "Which parcels contain toxic point source locations?," "Which rivers are within 1,000 meters of a road?," "Which cities are within 100 miles of a selected city," and so on. Spatial queries combined with attribute queries allow you to uncover complex patterns between spatial data layers and are a fundamental strength of a GIS. **Note:** XMap 6 Professional users can run spatial queries but cannot create them.

Buffering

Use the Buffer tool to build polygon geometries around existing geometries in a layer. The size of the buffer polygons is determined by a user-specified linear distance around the edge of the geometries in the existing layer. The new output polygon geometries are a merged combination of the original polygons and the buffer polygons. Buffering is often used in GIS spatial analysis when proximity issues are of concern, such as site planning or risk assessment.

Multiple Classifications

XMap-compatible DeLorme OpenSpace databases support the storage of more than one

classification against a GIS layer. The ability to create and store multiple classifications against a layer is particularly useful for rapid analysis of the data in the layer. Once the classifications are created, you can quickly switch between them for comparison to discover trends in the data, rather than recreating each classification and applying it each time. There is no limit to the number of classifications that can be stored against a layer, but only one classification can be active at a time. Like queries, classifications are transferred with a layer when it is duplicated or exported to an OpenSpace GIS file format.

Note: XMap 6 Professional users can view layer classifications but cannot create them.

Classification Templates

Classification Templates (.xmc files) are available in XMap 6 GIS Enterprise and XMap 6 GIS Editor. They are very useful for quickly transferring an existing classification configuration from one layer to another or between classifications within the same layer. Classification templates are useful when multiple layers have the same attribute fields and general range of attribute values. Once you create a classification for one of the layers and customize the symbolization of each class, you can save this configuration to a template and then apply it to the other layers. This can make your workflow more efficient.

Redlining & Layer Synchronization

Redlining refers to the process of using draw symbols, lines, and polygons to "mark up" a GIS layer without actually editing the layer itself.

The process of redlining is useful when a field worker has a subscription to one or more layers in a database created with XMap GIS Enterprise), but they do not have the proper level of user permissions to directly edit the GIS layers, or they use XMap 6 Professional and do not have the necessary editing tools. If, for instance, the field worker is tasked with inspecting and updating information contained in a layer based on any observed or measured changes (spatial or attribute), he or she can use the redline tool to make mark ups against the layer. On returning from the field, the field worker can submit redline layers to the data manager by clicking the synchronize button in the toolbar. The manager can evaluate the redlines and use them as a reference for updating the appropriate GIS layers.

Check-out/in

The Check-out/in tool in XMap 6 GIS Enterprise is a data distribution feature for Enterprise data management, editing, and updating. Individuals who have access to a layer in another

user's workspace can check out or check in portions of a layer or an entire layer. Checkout regions are determined by user-selected grids. These checkouts are exact copies of the geometries and attributes from the source layer and can be copied into any database to which the user has access. Once checked out, the user can edit the layer using the Editor or Enterprise versions of XMap or simply use it for reference in the field. Once the user is finished with the layer, they can check it in to the original source layer. All changes made to the data in the check-out portion are updated in the source layer; this allows XMap users to modify and update different portions of a single layer at a time.

Other Features

- High-resolution, recent imagery for many states available for purchase through the NetLink tab
- Street Atlas USA™ 2009 Handheld included free
- Multi-point registration with transparency and color control (XMap 6 GIS Enterprise and Editor only)
- Full U.S. National Grid support with easy to read grid and zone identifiers
- Topological editing and connectivity tools
- COGO—create vector GIS layers through coordinate geometry input
- Geocode addresses and lat/lon databases directly into vector GIS layers
- Reusable registration points in AutoCAD DWG/DXF file registration
- ESRI projection (.prj) file support
- Drag and drop importing of vector GIS layers
- Enterprise database management tools for the office and field
- Multiple base map data options
- Waypoints and draw object exchange with most popular handheld GPS models
- Split-screen map printing
- Enhanced 3-D terrain modeling with seamless fly over effect
- Customizable keyboard shortcuts
- GPX file support for draw object import and automatic route creation
- And much more!

The XMap GIS Family of Products

XMap 6 GIS Enterprise, XMap 6 GIS Editor, and XMap 6 Professional provide a three-tiered GIS solution for efficiently creating, importing, editing, classifying, querying, and sharing your GIS data in an enterprise environment. XMap 6 is equally suited as a standalone GIS software solution or as a supplement component to your existing GIS infrastructure.

In addition to GIS, these versions of XMap include powerful routing and in-vehicle navigation tools; advanced GPS support for field tracking and navigation; interoperability with Earthmate PN-Series GPS devices for field data collection and exchange of map data, waypoints, and tracks; map viewing software for PDAs; 3-D terrain modeling with simulated fly-over functionality; advanced printing tools; and much more.

XMap 6 GIS Enterprise

The upper tier of the XMap suite is designed to meet the specific needs of enterprise GIS managers who need to efficiently manage and deploy GIS data throughout a company. XMap 6 GIS Enterprise also includes all of the features in XMap 6 GIS Editor.

* Access your existing GIS databases with ArcSDE support
* Ensure data integrity with check-out/check-in tools
* Share data across the enterprise with database synchronization tools
* Create your own raster data layers with multi-point image registration
* Use the API Command Window to perform basic mapping functions from a third-party application

XMap 6 GIS Enterprise in conjunction with multiple seats of XMap 6 Professional provides a complete field force GIS data collection system.

XMap 6 GIS Editor

XMap 6 GIS Editor is a perfect choice for small GIS departments or for a company or organization that is considering the development of a GIS to increase productivity. XMap 6 GIS Editor also includes all the features in XMap 6 Professional.

* Import and work with a variety of GIS file formats including, ESRI .shp and .e00; MapInfo .mif and .tab; AutoCAD .dwg and .dxf; and more
* Geocode your existing data in .mdb, .xls, and other formats to create GIS layers

- Create and edit points, lines, and polygons with freehand draw tools or with precise coordinate geometry input tools
- Ensure the integrity of your line layers with topological editing
- Access advanced classification, annotation, buffer, and geospatial query tools
- Use the bulk importer-exporter for automated import and export of standard spatial data files
- Share your data online with XMap Web

XMap 6 Professional

XMap 6 Professional is ideally suited for field crews and mobile professionals. By offering access to GIS data that has been processed using the GIS Editor or GIS Enterprise editions of XMap, it provides an affordable alternative to a full-fledged GIS for use on the road and in the field.

- Optimize response time with the latest in-vehicle, voice-controlled navigation tools
- Perform country-wide searches of address locations and points of interest
- Easily redline data corrections to Enterprise GIS data and efficiently share these edits with your GIS administrator
- View your data in stunning 3-D with the latest terrain modeling technology
- Shapefile support—import shapefiles into the GIS tab and apply symbolization

XMap 6 Professional offers essential and fundamental mapping functions that include data visualization, access to aerial and satellite imagery, address-to-address routing, annotation tools, document linking, advanced printing, GPS support, and more. In addition, you can view and print GIS maps created using XMap 6 GIS Editor and XMap 6 GIS Enterprise.

Product Comparison	Enterprise	Editor	Professional
Multiple DeLorme base map options	✓	✓	✓
Door-to-door GPS navigation	✓	✓	✓
3-D terrain modeling	✓	✓	✓
Phone number searching (data optional)	✓	✓	✓
Third-party GPS support for data exchange	✓	✓	✓
Routable road adding tool	✓	✓	✓
MapShare for posting maps online	✓	✓	✓
OpenSpace (vector GIS format) viewing	✓	✓	✓
MrSID and GeoTIFF viewing	✓	✓	✓
Split screen for side-by-side map views	✓	✓	✓
Address geocoding	✓	✓	✓
Redlining for field data updating *	✓	✓	✓
Layer synchronization *	✓	✓	✓
Support for Earthmate PN-Series GPS devices	✓	✓	✓
API for remote access to basic mapping functions	✓	✓	✓
Shapefile import	✓	✓	✓
Data symbolization	✓	✓	✓
GIS check-out/check-in tool *	✓	✓	
Vector data importing (.shp, .dxf, .mif, .gml, etc.)	✓	✓	
Vector data creating and editing	✓	✓	
Attribute importing and editing	✓	✓	
Data classification	✓	✓	
Buffer tools	✓	✓	
Spatial and attribute query building	✓	✓	

	Enterprise	Editor	Professional
XMap Web (online GIS) publishing	✓	✓	
Multi-point image registration	✓	✓	
ArcSDE support	✓		
Administer databases for check-out/check-in	✓		
Administer database subscriptions for synchronization	✓		
Redline administration and integration	✓		

Note: These features require database administration with XMap Enterprise.

Installation Instructions

Follow the instructions below to install XMap 6.

1. Insert the installation DVD into your computer's DVD drive. Setup automatically begins. If not, browse to the DVD drive and double-click **Setup**.

2. On the License Verification screen, type your XMap license key in the text boxes.

3. Click **Validate**.

4. On the Welcome screen, click **Next**.

5. On the License Agreement screen, read the license agreement and select the **I accept the terms in the license aggrement** option. Then, click **Next**.

6. On the User Information and Registration screen, if your computer is connected to the Internet and you want to register online during the installation process, enter the required information. Then, click **Next**.

   OR

   If you want to register later, type your first and last names in the boxes, clear the **Register Online** check box, and then click **Next**.

7. On the Destination Folder screen, if you want to install XMap in a folder other than the default location, click **Change** and select an alternate folder. Otherwise, click **Next**.

8. On the Customize Setup screen, to install all features as shown, click **Next**.

   OR

To select or modify the program features you want to install, click the arrow next to each feature to select an option.Then, click **Next**.

Note: If Palm OS or Windows Mobile software is detected on your computer, the StreetAtlas USA 2009 Handheld option displays.

9. Click **Install**.

10. When prompted, click **Finish**. If you registered during installation, you will receive a verification e-mail at the e-mail address you specified. Your product will not be registered until you verify your registration.

Modifying, Repairing, or Removing the Installation Settings

After installation, you can modify, repair, or remove the installation using the Change option in Add/Remove Programs.

1. From the **Start** menu, point to **Control Panel** and then browse to **Add/Remove Programs**.

2. Under Currently Installed Programs, click to select your DeLorme XMap application.

3. In the highlighted block, click **Change**. The InstallShield wizard displays.

4. Click **Next**. The Program Maintenance screen displays.

5. If you want to modify which features are installed:

   a. Select the **Modify** option and click **Next**.

   b. To disable a feature, click the hard drive icon next to the option and then select the **This Feature Will Not Be Available** option in the menu.

   OR

   To enable a feature, click the hard drive icon next to the option and then select the **This Feature Will Be Installed on Local Hard Drive** option in the menu.

   c. Click **Next**.

   d. Click **Install**.

   e. When prompted, click **Finish**.

6. If you want to repair any installation errors in the program (for example, if there are

missing or corrupt files, shortcuts, and/or registry entries), select the **Repair** option, click **Next**, click **Install**, and then click **Finish**.

7. If you want to remove XMap from your computer, select the **Remove** option and click **Next**. Then, click **Remove** to begin the removal process.

Helpful Information for Upgrading from a Previous Version of XMap

What To Do With Older OpenSpace GIS Layers

You can import OpenSpace layers from previous versions of XMap into XMap 6 using the Import Wizard in the GIS Workspace subtab. **Note:** Layers that are stored in previous versions of XMap databases will not have access to all of the features available in XMap 6.

To upgrade your older files to the XMap 6 format, use the New/Duplicate Layer feature in the GIS tab and copy them to an XMap 6-compatible database. Advanced users can convert multiple files using the XMap GIS Bulk Importer/Exporter by exporting the layers from older XMap databases and OpenSpace files and importing them back into XMap 6 databases. The XMap Help topics include step-by-step procedures for using the Copy Layer feature and the XMap GIS Bulk Importer/Exporter.

How to Connect to an Existing Database

XMap uses Microsoft SQL Server as its DeLorme OpenSpace database engine. You can connect only to databases that were created in previous versions of XMap. You can use the local version of Microsoft SQL Server that installs with XMap, or you can connect to an existing SQL Server in an Enterprise environment where DeLorme OpenSpace databases were previously created.

To connect to a local database created in XMap 4.5 using **MSDE SQL Server 2000**, type **<server name>\DELORMEMAPPING** and click **Connect** in the Attach Database dialog box or when connecting to the database in Database Manager. Note that MSDE SQL Server 2000 (with a local instance of "DELORMEMAPPING") was automatically installed when XMap 4.5 users selected to connect to a local database during installation.

OR

To connect to a local database created in XMap 5.x using **SQL Server 2005 Express**,

type **<server name>\XMAP5** and click **Connect** in the Attach Database dialog box or when connecting to the database in Database Manager. Note that Microsoft SQL Server 2005 Express (with a local instance of "XMap5") was automatically installed during the XMap 5.x installation unless MSDE SQL Server 2000 was already present on your system.

OR

To connect to a local database created in XMap 6 using a new installation of **SQL Server 2005 Express** (one not previously installed with XMap 5.x), type **<server name>\ XMAP6** and click **Connect** in the Attach Database dialog box or when connecting to the database in Database Manager. Note that Microsoft SQL Server 2005 Express (with a local instance of "XMap6") is automatically installed during the XMap 6 installation unless SQL Server 2005 Express with the XMap5 instance is already present on your system

OR

To connect to a database in an existing **Enterprise SQL Server**, type **<server name>** and click **Connect** in the Attach Database dialog box or when connecting to the database in Database Manager. Contact your database administrator if you experience problems establishing a connection to the enterprise SQL Server.

Notes:

- To access the Attach Database dialog, select the **Other** option from the **Database** drop-down list in the Create Layer, Manage Layers, and Import dialogs.
- For the server name of local editions of SQL 2000 or 2005 Express, try localhost, (local), or <computer name>. Note that the computer name must be used if connecting to a local database on the computer of another XMap user in your network group.
- XMap 6 uses either MSDE SQL Server 2000 or SQL Server 2005 Express. **DO NOT** uninstall MSDE SQL Server 2000\DELORMEMAPPING if it is already present on your system before installing XMap
- The XMap 6 install automatically installs SQL Server 2005 Express\XMap6 if it detects the presence of MSDE SQL Server 2000\DELORMEMAPPING. You can connect to both database instances in XMap 6 and migrate your data from the DELORMEMAPPING instance to the XMap6 instance to take advantage of new features in XMap6 databases.
- MSDE 2000 and SQL Server 2005 Express have limited database capacities of 2 GB. If you use XMap in an Enterprise environment, it is recommended that you store DeLorme OpenSpace databases in an Enterprise version of Microsoft SQL Server that

Interface Guide

You can access most of the functions in XMap using the tabs below the map area.

Map Data—Add data to projects and manage projects

GIS—Import or create vector GIS layers; link attribute data; classify and adjust how the data displays; build queries; and more

Print—Print single or multi-page maps of the current map view, route details, elevation profiles, or XData datasets

Find—Search for locations on the map

Phone—Search for residential or business phone listings (Phone Data required)

Info—Get information about a map feature

NetLink—Purchase datasets, learn about product updates, link to www.delorme.com

ImageReg—Register images to a map

Draw—Add annotation or redline additions to a map

Profile—profile elevation graphs for a selected linear object on a map

3-D—View and fly over your map in 3-D

Route—Create and manage routes

GPS—Connect a compatible GPS device to your system and view your position in real time as you travel

Voice—Issue voice commands and receive spoken directions

Handheld Export—Export a map to an Earthmate PN-Series GPS receiver or a PDA

XData—Import, locate, and manage data using an address, ZIP Codes, or coordinates

Use the **toolbar** to perform many GIS- and toolbar functions. GIS toolbar task committing changes, synchronizing da managing projects, printing, routing, p

Not all of the toolbar features are activ want to view, right-click the toolbar. To currently displayed in the toolbar. Click

-related operations in addition to standard mapping
s include redlining, COGO editing, editing a layer,
ta, and more. Other toolbar features include
rofiling, online sharing, panning the map, and more.
ated by default. To modify which toolbar items you
olbar options with a check mark next to them are
the item to toggle it to show or hide it in the toolbar.

The map area contains a primary map and a
secondary map. Depending on the percentage
of the map area you have exposed, you may see
both maps or only one.

Viewing either the primary or secondary map is
helpful when you want to view a large area on
the map.

Splitting the map to view both the primary and
secondary maps allows you to view multiple
data types for the same geographic area, as
shown to the left.

To conceal/expose the primary/secondary
maps, either drag the map resize tool (the
vertical bar that splits the two map views) or
click the arrows on the resize tool to resize the
map area.tool to resize the map area as desired.

The Control Panel includes features
for viewing/controlling:

- Data zoom level
- Map panning
- Map rotation
- Coordinates
- Elevation
- Contour interval
- Map scale

does not have this size limitation.

What To Do With Existing Datasets

If you have saved any imagery or data, including Aerial Data Packets (ADPs), to the default location in previous versions of DeLorme software (C:\DeLorme Docs\Downloads), you must manually copy each file to the new DeLorme Docs\Downloads folder located in C:\ Documents and Settings\All Users\Documents\DeLorme Docs. This will allow the imagery or data to automatically display as a base data connection. Each data and imagery type is available to separately download from NetLink; however, you can still use any ADPs that you may have.

If you have existing map datasets such as 3-D TopoQuads, XMap USA Street Level Data, or XMap USA Topographic Data, you can view them in this version of XMap. The procedure for viewing base map data in XMap 6 is the same in previous versions of XMap. The data can be viewed while it is in your DVD drive or from your computer's hard drive after the data is saved. If the data does not display in XMap, click the **Map Data** tab, click **Data**, and then click **Base Data**. Then add the hard drive location where the data is saved (the DVD drive is automatically added as a base data location).

You can view older versions of Phone Data in XMap 6. For more information on connecting Phone Data, see the *Searching for Phone Book Listings* and *Using Phone Data with the Phone Tab* Help topics in XMap.

Helpful Information for Migrating from other DeLorme Products

You can import and use all of the files you created in previous versions of DeLorme mapping software (including previous versions of XMap, Topo USA, and Street Atlas USA) in XMap 6. For more information, see the *Important Information for Existing DeLorme Software Users* on page 2.

- You can open projects/map files from Topo USA and Street Atlas in XMap. To open a project, click the **Map Data** tab, click **File**, and then click **Open** to browse to the project you want to view.

- To add existing route and draw files from XMap, Topo USA, and Street Atlas USA to your current XMap project, click the **Map Data** tab, click the **Data** button, click **Add**, then browse to the route or draw file location (usually the Navigation and Draw

folders in the DeLorme Docs folder).

- To add existing XData datasets from XMap or Street Atlas USA Plus to your current XMap project, click the **Map Data** tab, click the **Data** button, click **Add**, then browse to the XData dataset location (by default the Datasets folder in the DeLorme Docs folder).

Note: In XMap 6 GIS Editor or XMap 6 GIS Enterprise, you can directly import draw files and XData datasets into the OpenSpace GIS layers and use them in the GIS tab.

Helpful Information for Migrating from other GIS Products

If you are replacing your current GIS with XMap, or if you are using XMap in conjunction with your current GIS, you must import your GIS files into XMap OpenSpace GIS databases to use in XMap. The first step in migration is to know your data. If your data does not have projection, coordinate, and datum information embedded in the file, you must specify these parameters during import. This information is often included in an accompanying metadata file.

You can import your data using the XMap GIS Bulk Importer/Exporter or the GIS Import Wizard on the GIS tab. Alternatively, you can simply drag and drop the data files onto the map and the import wizard will automatically begin.

Once the data is imported, use the tools in XMap to create subscriptions to the layers, user accounts to OpenSpace databases, and more. For more information on these features, see the XMap Help topics.

To add raster GIS layers, such as MrSID or GeoTIFF files, to your current XMap project, select the **Map Data** tab, click the **Data** button and choose **Add**. Browse to the location of the file and click **OK**.

Basic Functions

The XMap Help Topics include instructions for using all of the basic and advanced functions of XMap. To access the Help Topics, click the **Help** button on the toolbar and then click **Help Topics**.

[?]-

Navigating the Map

There are multiple ways you can navigate the map:

- Use the Navigation tool to click the location on which you want to center the map.
- Use the grab-and-pan tool on the toolbar to drag the map in any direction.
- Use the search features 🖐 in the Find tab to center the map on your location of interest.
- Double-click a layer in your GIS workspace to center the map on that layer.
- Drag the view box in the Overview Map to center the map on the location you want.

Zooming the Map In or Out

XMap includes several methods for zooming the map in or out:

- Drag-and-zoom map controls—with the Navigation tool selected, left-click and drag the mouse in a down-right direction to zoom in or drag the mouse in an up-left direction to zoom out. To move the view box to another location, press the SHIFT key at any time during this procedure without switching back to the Navigation tool.
- Manually adjust the data zoom level with the Data Zoom scroll box in the Control Panel.
- Use the zoom tools in the Control Panel to zoom the map in one level, out one level, or out three levels.
- Press ALT+PAGE UP on your keyboard to zoom out to the next full data zoom level. Press ALT+PAGE DOWN on your keyboard to zoom in to the next full data zoom level.
- Rotate the mouse wheel (if available) to zoom in by individual data zoom level steps or hold the SHIFT key while rotating the mouse wheel to zoom to the next full data

zoom level.

Changing the Base Map

You can add map datasets, such as XMap USA Street Level Data and USA Topographic Data, to XMap using the Base Data feature. Click the **Map Data** tab, click **Data**, and then click **Base Data**. Then add the path where the data is stored on your system. Once a dataset has been added to base data, it is automatically loaded in all other projects.

By default, the DVD drive on your computer is a base data location. Also, any compatible datasets that you have saved to your hard drive since you installed XMap should display in the Base Data locations list.

Changing the Map View to Show a Single Map or a Split Map

Use the split-window in XMap to view two maps at the same time.

You can access the left (secondary) map by sliding the divider bar that runs perpendicular to the tab area. When you move the bar all the way to the left of the map, only the primary map displays. When you move the bar all the way to the right, only the secondary map displays. Drag the divider bar to adjust the display areas of the primary and secondary maps.

Importing GIS Layers

You can import ESRI (.shp, .e00), MapInfo (.mif, .tab), AutoCAD (.dxf, .dwf, .dwg), Geocode Types (.asc, .csv, .dbf, .txt, .mdb, .xls. tab), XData datasets, DeLorme draw files, and DeLorme OpenSpace GIS transfer files into a database that you can then classify, symbolize, analyze, and edit. The import process varies depending on the type of file that you are importing (for instance, if the file contains spatial reference information or if it is a geocode file type). You can also import data from an ArcSDE database. For more information, see the *Working with GIS/Managing Layers in Your Workspace/Importing a Layer into a Database* Help topics.

Installing XMap Datasets

Most of the datasets that are described in this section can be installed to your computer's

hard drive (helpful when you want to view multiple data types in a single project) or viewed by inserting the data DVD into the DVD drive each time you want to view the data.

XMap Datasets

If XMap is not installed before you install the data or if your version of XMap is not listed during the install, you must use the Map Data tab in XMap to manually add the data to the base data. For more information, see *Changing the Base Map* on page 21.

XMap USA Street Level Data

This dataset can be saved on a hard drive or run from a DVD drive.

1. Ensure XMap is installed.

2. Insert the data DVD into your computer's DVD drive. Once the DVD is detected, you will be asked if you want to save the data to your hard drive. If you do want to save the data, click **Yes** and proceed with the following steps. If you do not want to save the data, click **No** (you will need to insert the data DVD into your DVD drive each time you want to view the data in the program).

3. Click **Next**. The Destination Folder screen appears.

4. Optional: If you want to save the data somewhere other than the default location, click **Change**. The Change Current Destination Folder screen opens; select a hard drive location from the Look In drop-down list. You can also browse to the new location or use the New Folder button to create a new folder for the data. Click **OK**.

   OR

   If you know the path where you want to install the data, enter it into the Folder Name text box. Click **OK**.

5. Click **Next**.

6. On the Data Connection Options screen, select the check box next to each installed DeLorme program that you want to use to view the dataset and then click **Next**.

   Note: If this screen does not appear or if your software is not listed, you must manually add the data to XMap. See *Changing the Base Map* on page 21.

7. On the Ready to Install Program screen, click **Install**.

8. When prompted, click **Finish**. The data automatically displays in the programs you selected in step 6.

XMap USA Topographic Data

This dataset can be saved on a hard drive or run from a DVD drive. For best performance when using the DVD from a DVD drive, first complete a Compact installation (see step 6).

1. Ensure XMap is installed.

2. Insert the data DVD into your computer's DVD drive. Once the DVD is detected, you will be asked if you want to save the data to your hard drive. If you do want to save the data, click **Yes** and proceed with the following steps. If you do not want to save the data, click **No** (you will need to insert the data DVD into your DVD drive each time you want to view the data in the program).

3. Click **Next**. The Destination Folder Screen appears.

4. Optional. On the Destination Folder screen, if you want to save the data somewhere other than the default location, click **Change**. The Change Current Destination Folder screen opens. Then:

   Select a hard drive location from the Look In drop-down list. You can also browse to the location or click the New Folder button to create a new folder for the data. Click **OK**.

   OR

   If you know the path where you want to install the data, type (or paste) it into the Folder Name text box. Click **OK**.

5 Click **Next**. The Setup Type screen appears.

6 Select the **Complete** option if you want to install all of the data regions to your hard drive.

   OR

   Select the **Custom** option if you want to customize which data regions are saved to your hard drive.

   OR

   Select the **Compact** option if you want to use the data DVD each time you want to

access the data. Select this option to install the minimum required amount of connectivity data to your hard drive; you must insert the DVD to view the map data.

7   Click **Next**.

8. If you selected **Complete** or **Compact** in step 6, go to step 9. If you selected **Custom** in step 6, the Custom Setup screen displays. Click the plus signs next to West Regions or East Regions to show the individual regions for each. To learn which states are included in a specific region, click to highlight it and then read the feature description to the right.

    •   To disable a region, click the hard drive icon next to the option and then select the **This Region Will Not Be Available** option in the menu.

    •   To change the location where a region is installed, highlight the region and then click **Change**. Use the Change Current Destination Folder screen to select a new hard drive location for the region.

    •   To determine how much disk space is required/available for a data region, highlight the region and then click **Space**. The Disk Space Requirements screen displays the hard drive size and availability as well as the disk space required for the selected region. Click **OK**.

    Click **Next**.

9. On the Data Connection Options screen, select the check box next to each installed DeLorme program that you want to use to view the dataset and then click **Next**.

    Note: If this screen does not appear or if your software is not listed, you must manually add the data to XMap. See *Changing the Base Map* on page 21.

10. On the Ready to Install program screen, click **Install**.

11. When prompted, click **Finish**. The data automatically displays in the programs you selected in step 9.

NetLink Imagery and Data

You can download imagery and data ordered through XMap's NetLink tab or receive it on

DVD. For more information, click the **Map Library** subtab on the NetLink tab. Follow the steps below to save your data on DVD to your local hard drive.

Imagery and Data on DVD

1. Insert the DVD into your DVD drive.

2. Browse to your DVD drive.

3. Copy the entire contents of the DVD and paste it anywhere on your hard drive.

Sat 10

1. Insert the Sat 10 DVD into your DVD drive.

2. From the Start menu, click **Run**. Type **D:\Setup** (where D:\ is the letter of the DVD drive containing the Sat 10 DVD) in the command line text box and click **OK**.

3. Follow the on-screen directions to complete the data installation. The Sat 10 data folder is then saved on your hard drive at *Program Files\DeLorme\Sat*.

3-D TopoQuads Data (USGS 7$^{1/2}$' quads)

1. Create a folder on your hard drive called **3-D TopoQuads Data**.

2. Within the 3-D TopoQuads Data folder, create a subfolder for your data DVD or create subfolders for each of your regional data DVDs.

3. Insert the 3-D TopoQuads DVD into your DVD drive.

4. Using Microsoft Windows Explorer, browse to your DVD drive.

5. Right-click the DVD drive and click **Copy**.

6. Right-click the folder you created in step 2 and click **Paste**.

Adding Data to XMap

You can add imagery and data from NetLink to your base data to make it available in the current project and all future projects, or you can add it to a specific project.

To add it as base data, see *Changing the Base Map* on page 21.

To add it to a specific project, open the project, click the **Map Data** tab, click **Data**, and

then click **Add**. Browse to your file and select it. Then select the map you want to add the file to and click **Add**.

Phone Data

To install the phone data, insert the Phone Data DVD into your computer's DVD drive and follow the on-screen instructions in the installation wizard. To use the phone data from the DVD without installing it, close the installation wizard, click the **Phone** tab, click **Data**, browse to your DVD drive, and click **OK**.

Add-ons for XMap

This section describes some of the many DeLorme software and hardware product offerings that work with your XMap system.

Map Datasets

DeLorme offers multiple base map datasets to suit your mapping and GIS needs. Some of the many options include:

- **XMap USA Street Level Data—**Vector maps with routable street-level detail and places of interest covering the United States and Canada
- **XMap USA Topographic Data—**Vectorized USGS topographic and elevation data with over 300,000 miles of trails as well as street-level detail for the United States
- **Imagery and Data—**Includes various types of imagery and data, such as 10-meter satellite imagery, USGS DOQQ, USGS 7.5-Minute Quads, NOAA Charts, a Digital Elevation Model, and more. Previously called Aerial Data Packets (ADPs); you can still use any ADPs you may have.
- **Phone Data—**Over 140 million searchable residential and business phone listings for the United States and Canada

For more information about these datasets and others that DeLorme offers, visit www.delorme.com or click the NetLink tab in XMap.

Earthmate GPS

The Earthmate family of products offers Bluetooth, laptop, PDA, and handheld GPS

solutions. For the latest in Earthmate offerings, visit www.delorme.com.

Additional Software

GeoSpider is a 3-D network adjustment software that provides surveyors and engineers with the required tools and capabilities to verify the accuracy of their terrestrial and GPS networks.

Getting Help

The Help system provides explanations of all of the features and functions of XMap. To access the Help system, click the **Help** button   on the toolbar and then click **Help Topics**.

A link to a printable User Guide on our website is also available from the Help menu. The User Guide includes the entire Help system   ⒦▾   contents in a portable document format (.pdf). To access the User Guide, click the Help button in the toolbar and then click **User Guide**.

Training

An official DeLorme training program for you and your colleagues can help you appreciate the true worth of your purchase by optimizing your workflow and revealing the wide variety of mapping tools that you now have at your disposal. DeLorme can conduct a training program at your location, at DeLorme headquarters in Yarmouth, Maine, or online using a Web meeting service.

To schedule your class, contact training@delorme.com or call 207-846-7000 and ask for the training coordinator.

Troubleshooting

Map Data Doesn't Display in All Projects

The procedure for adding data to XMap varies depending on if you want to add the data to the current project or if you want to add it to all projects. If you have only added the data to the current project and you want to view it in all projects, you will need to add the data as base data in the application.

Use the steps below to add a map dataset as base data.

1. Click the **Map Data** tab.

2. Click **Data** and then click **Base Data**. The Base Data Locations dialog box lists each of the data sources on your system.

3   Click **Add**, select the hard drive location where you saved your data from the Browse for Folder dialog box, and click **OK**. The OK button is enabled when you select a folder containing a file that contains the properties of the map data being added.

4. Click **Done**.

What is my Server Name?

Your server name will vary, depending on if you are connecting to an MSDE database or SQL Server 2005 Express database.

- To connect to an MSDE database, type **<server name>\DELORMEMAPPING** in the Attach Database dialog box or when connecting in Database Manager. The server name can be localhost, (local), or the computer name.

- To connect to a SQL Server 2005 Express database, type **<server name>\XMAP6** in the Attach Database dialog box or when connecting in Database Manager. The server name can be localhost, (local), or the computer name.

- To connect to an Enterprise SQL Server database, type **<server name>** in the Attach Database dialog box or when connecting in Database Manager. Contact your database administrator if you experience problems establishing a connection to the Enterprise SQL Server.

Workspace Does Not Display Any Layers

If there are no layers in your workspace, you may have accidentally removed the layers from the workspace. To retrieve the layers, click the **GIS** tab, click the **Workspace** subtab (if it is not currently selected), click the **Layers** button, and then click **Manage**. Select the Source Database you want to pull layers from, highlight the layers in the Database, and then click the Move or Move All button to move the layers into your workspace. If no source databases are listed, click the **Other** option to connect to an existing database. If no databases have been created, to recreate them with Database Manager or select the **New** option in the **Database** drop-down list in the Create Layer or Import dialogs.

If you use the above procedure and you still cannot view layers in your workspace, contact the Database Administrator to verify the database you are connected to is running correctly and is not disconnected.

The Map View is Blank

If you installed compatible data to your hard drive before XMap was installed, your map area may appear blank when you open the program. If your map area is blank, you must update the Base Data settings in the Map Data tab to include that data in your projects. For instructions on adding data to your base data settings, see the first *Troubleshooting* topic, *Map Data Doesn't Display in All Projects*.

Minimum System Requirements

- Microsoft® Windows XP, SP2 with 512 MB RAM (1 GB+ MB recommended)
- Microsoft Windows Vista™ Business, or Ultimate: 1 GB RAM (2+ GB recommended)
- Intel® Pentium PC 1.5 GHz or higher processor (1.5+ GHz Dual Core recommended)
- 1 GB of available hard-disk space (2 GB+ recommended). Note: 4.1 GB of available hard disk space required to install phone data for all regions (can be run from DVD)
- 3D-capable video card with 64 MB VRAM (128+ MB recommended)
- Microsoft Internet Explorer 6.01 (Service Pack 1) or later
- DVD-ROM drive
- 1024 x 768 screen resolution or higher

Contacting DeLorme

For sales and general product questions, phone 800-293-2389 Monday–Friday (excluding holidays). To order online, visit the XMap website at www.xmap.com.

You can also receive product support using the following resources:

Support Web Site: www.delorme.com/support

Community Forums: forum.delorme.com

E-mail: www.delorme.com/support/email_ts.asp

Phone: 207-846-8900 (visit www.delorme.com/support/policy.asp for operational hours.)